

## CLAIMS

1. An organic thin film transistor comprising:  
an organic substrate;  
a gate electrode;  
5 a gate insulating film;  
an organic semiconductor film;  
a source electrode; and  
a drain electrode,  
wherein an average surface roughness Ra of the  
10 gate electrode which is in contact with the gate  
insulating film is 0.1 nm to 15 nm.
2. The organic thin film transistor according  
to claim 1, wherein the organic substrate is made of  
one of a glass epoxy resin and polyethylene  
15 terephthalate.
3. The organic thin film transistor according  
to claim 1, wherein the organic substrate is made of  
polyimide.
4. A method of manufacturing an organic thin  
20 film transistor comprising an organic substrate, a  
gate electrode, a gate insulating film, an organic  
semiconductor film, a source electrode, and a drain  
electrode, the method comprising the step of:  
preparing an organic substrate in which a  
25 planarized gate electrode is formed on a surface  
thereof; and  
forming a gate insulating film on the

planarized gate electrode,

wherein an average surface roughness  $R_a$  of the planarized gate electrode is 0.1 nm to 15 nm.

5 5. The method of manufacturing an organic thin film transistor according to claim 4, wherein the organic substrate is made of one of a glass epoxy resin and polyethylene terephthalate.

6. The method of manufacturing an organic thin film transistor according to claim 4, wherein the  
10 organic substrate is made of polyimide.

7. The method of manufacturing an organic thin film transistor according to claim 4, wherein the planarized gate electrode is formed by sputtering.

8. The method of manufacturing an organic thin  
15 film transistor according to claim 4, further comprising planarizing the gate electrode.

9. The method of manufacturing an organic thin film transistor according to claim 8, wherein in planarizing, at least one of chemical mechanical  
20 polishing (CMP), soft etching, and polishing tape processing is performed.